

IN THE CLAIMS:

1. **(Currently Amended)** A safety coupling arrangement (10) comprising a coupling part (11), that can be adapted for fixed co-action with a shaft, axle or the like, that functions to transfer torque and rotary movement to said safety coupling, and a further coupling part (12), which is adapted for fixed co-action with a shaft, axle or the like to transfer torque and rotational movement from the safety coupling, and further including a safety unit (13), wherein said safety unit is adapted to take one of two settings, a first setting[,] in which torque and rotary movement can be transferred between said two coupling parts (11, 12) and a second setting[,] in which no torque and rotational movement can be transferred between said two coupling parts, wherein said safety unit (13) includes a subpart or a body (13') that can take said first setting as a result of an expansion caused by applying pressure to a cavity (13a) within the safety unit (13) and enclosing said pressure in said cavity, and is able to take its second setting by evacuating said pressure from said cavity (13a), characterised in that wherein a first coupling part (11) or a second coupling part (12) includes an axially directed, or generally axially directed, groove (12a), in that, wherein said groove (12a) is adapted to be able to surround a pressure expandable subpart (13'; 13b, 13b') in said safety unit (13) and the whole, or essentially the whole, of said cavity (13a), and in that wherein said expandable subpart (13'), when in its first setting, functions to allow torque to be transferred directly to said

first coupling part (11) or said second coupling part (12) via two mutually opposing surface parts (13c, 13d), which are frictionally active against opposing outer parts (12b, 12c) of the axially directed groove (12a).

2. **(Currently Amended)** An arrangement according to Claim 1, ~~characterised in that wherein~~ said one or said other coupling part (12) includes a collar (12d), which is centred or essentially centred with respect to, said axially directed groove (12a).

3. **(Currently Amended)** An arrangement according to Claim 2, ~~characterised in that wherein~~ said collar (12d) is integrated with said one coupling part or said other coupling part.

4. **(Currently Amended)** An arrangement according to Claim 1, 2 or 3, ~~characterised by including~~ an outer radial groove (12g), formed between a flange (12e) and said collar (12d), said flange belonging to one or the other coupling part.

5. **(Currently Amended)** An arrangement according to Claim 4, ~~characterised by that wherein~~ a thin material section (12f) is formed in said one or said other coupling part, between said outer radial groove (12g) and said axially directed groove (12a) of said safety unit.

6. **(Currently Amended)** An arrangement according to Claim 5, ~~characterised in that wherein~~ said thin material section (12f) is elastically resilient.

7. **(Currently Amended)** An arrangement according to Claim 1, ~~characterised in that wherein~~ said safety unit (13) is integrated with and constitutes said first coupling part (11) or said second coupling part

and includes a flange (11e) for fixed co-action with the torque transferring shaft (11') connected to the safety coupling.

8. **(Currently Amended)** An arrangement according to Claim 1, ~~characterised by including~~ a pressure medium filling nipple (14), such as oil, which extends radially out from the safety unit (13) and is positioned in connection with said one coupling part or said other coupling part and its collar (12d).

9. **(Currently Amended)** An arrangement according to Claim 1 or 8, ~~characterised by including~~ a device (15), which is fixed in relation to said collar (12d), which co-acts with or is able to co-act with said filling nipple (14) such that a small relative movement between said first coupling part and said second coupling part and said safety unit will cause the filling nipple to shear, for a rapid evacuation of said pressure.

10. **(Currently Amended)** An arrangement according to Claim 1 or 5, ~~characterised by including~~ a first ball bearing ring (16) placed at the bottom of the safety unit groove for co-action between said safety unit and said groove.

11. **(Currently Amended)** An arrangement according to Claim 1, 2, 5 or 10, ~~characterised by including~~ a second ball bearing ring (17) placed adjacent an opening of said safety unit groove for co-action between the safety unit and said groove.

12. **(Currently Amended)** An arrangement according to Claim 1, ~~characterised in that~~ wherein said axially directed groove (12a) has a

conical cross-sectional shape with the widest part facing towards an adjacent part.

13. **(Currently Amended)** An arrangement according to Claim 1 or 12, ~~characterised in that wherein~~ the cross-sectional shape of said subpart (13') and its sections (13b, 13b') has a corresponding conical shape.

14. **(Currently Amended)** An arrangement according to Claim 1, 12 or 13, ~~characterised in that wherein~~ said axially directed groove and said corresponding sections (13b, 13b') have a stepped cross-sectional shape with the widest part facing towards an adjacent part.

15. **(Currently Amended)** An arrangement according to Claim 1, ~~characterised in that wherein~~ the free end portions of the material sections or the legs forming said axially directed groove (12a) are coordinated with locking means (110) provided there between and adapted to prevent any divergence of said free end portions when the safety unit (13), together with its associated subpart or body (13'), takes its first and expanding setting.

16. **(Currently Amended)** An arrangement according to Claim 15, ~~characterised in that wherein~~ said first coupling part (11) and said second coupling part (12) are mutually adapted to include mutually overlapping and coordinated cylindrical subsections (124, 111) on a respective side of an axially directed groove (12a).

17. **(Currently Amended)** An arrangement according to Claim 16, ~~characterised in that wherein~~ said first coupling part (11) includes two

axially directed edges (112, 113), each adapted for co-action with a respective groove (126, 127) formed in the second coupling part (12).

18. **(Currently Amended)** An arrangement according to Claim 16 or 17, characterised in that wherein said edges (112, 113) are related peripherally to said first coupling part (11), and in that wherein said groove (126, 127) is formed peripherally in said second coupling part (12).

19. **(Currently Amended)** An arrangement according to Claim 16, characterised in that wherein said subsection (124, 111) is adapted for torque transmission via axially orientated and cylindrical outer sections (115, 116; 128, 129).

20. **(Currently Amended)** An arrangement according to Claim 16 or 19, characterised in that wherein the length of said outer sections and a normal pressure dependent on the chosen expansion of the expandable subpart (13') are adapted for a torque transfer of between 10 and 30% of the total torque transferred between said coupling parts (11, 12).

21. **(Currently Amended)** An arrangement according to Claim 20, characterised in that wherein the chosen torque transfer is adapted to between 15 and 25%.

22. **(Currently Amended)** An arrangement according to Claim 1, 15, 16 or 20, characterised in that wherein in that the axially directed groove (12a) has a length of more than 50% of the length of said expandable subpart (13').

23. **(Currently Amended)** An arrangement according to Claim 22, characterised in that wherein said length is adapted to be less than 80% of the axial length of said expandable subpart (13').

24. **(Currently Amended)** An arrangement according to Claim 16, ~~17 or 18~~, characterised in that wherein said overlapping subsections have the same, or essentially the same, radial thicknesses.

25. **(Currently Amended)** An arrangement according to Claim 15, ~~16 or 17~~, characterised in that, wherein with regard to the overlapping subsections, the outer subsection has a greater thickness than the inner.

26. **(Currently Amended)** An arrangement according to Claim 15, characterised in that wherein the first coupling part (11) is formed to function as a locking means against expansion of the free end portions of the legs forming said groove (12a) in the second coupling part (12).

27. **(Currently Amended)** An arrangement according to Claim 15 or 26, characterised in that wherein the legs forming said groove (12a) have the same, or essentially the same, material thickness.

28. **(Currently Amended)** An arrangement according to Claim 1, ~~15 or 27~~, characterised in that wherein the radius difference ( $D_1$ ) between the mutually opposing cylindrical outer parts ( $12b$ ,  $12c$ ) of the groove (12a) is smaller than, equal to or essentially equal to the total radial thickness ( $D_2$ ,  $D_3$ ) of said free end portions or legs.